

REMARKS

The Filice in view of Muhlhausen Rejection

In the Final Office Action, the Examiner rejected claims 1, 2 and 9-11 as being unpatentable under 35 U.S.C. § 103(a) over Filice in view of Muhlhausen. The Applicant respectfully traverses this rejection because Filice teaches away from the claimed invention.

Filice requires a ball bat wherein the barrel has a relative movement towards the handle upon impact to enforce and enhance the adhesive effect of the elastomeric material placed between the barrel and the handle (Filice Spec., col. 4, line 66 – col. 5, line 19). In contrast, the claimed invention provides a barrel which moves away from the handle upon impact by a ball, to reduce the transfer of transverse waves to the handle (Spec., pp. 9-10).

During the swing of a bat, the bat rotates about a point near the bat knob. This rotation produces a strong centripetal force on the outer bat barrel, which tends to pull the barrel away from the handle. In Filice, this separation brings the handle and barrel into closer contact so that the vibrations set up in the barrel due to the ball impact are more readily transferred to the handle, where they are felt as sting on the batter's hands. In the claimed invention, the barrel-handle separation brings the handle and barrel further apart, increasing the isolation between the handle and barrel and thus reducing the transfer of vibrations from the barrel to the handle. This is illustrated in the figures submitted herewith.

These figures illustrate the effect of the bat swing on the geometry of the Filice bat and the claimed invention. The bats are at rest in Figures A and C, and they are rotating about the knob in the plane of the page in Figures B and D. The outward centripetal force caused by the bat rotation is indicated by the arrows in B and D. Figure A shows the Filice bat at rest, with the handle separated from the barrel. When the bat is swung, the centripetal force pulls the barrel outward and squeezes the barrel and handle together, as shown in Figure B. This makes it

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easier for the sting wave to propagate from the barrel to the handle. Figure C shows the bat of the claimed invention at rest, with the handle separated from the barrel. Now when the bat is swung and the centripetal force pulls the barrel outward, the barrel and handle are further separated, as shown in Figure D, instead of being pulled together. This makes it more difficult for the sting wave to propagate from the barrel to the handle. Therefore, a person of ordinary skill in the art would not be motivated to modify the ball bat of Filice to the invention claimed in claim 1 of the present invention.

Since Filice teaches away from the claimed invention, the combination of Filice and Muhlhausen must also teach away from the claimed invention. Applicant therefore requests that the Examiner withdraw the 103(a) rejection and pass claim 1 to issuance.

Claims 2 and 9-11 are dependent claims which ultimately depend from independent claim 1 which is believed to be patentable for the reasons explained above. Therefore, Applicant respectfully submits that dependent claims 2 and 9-11 are patentable for depending from a patentable base claim.


The Filice in view of Muhlhausen in further view of Peng Rejection

The Examiner has also rejected claims 3-8 as being unpatentable under 35 U.S.C. § 103(a) over Filice in view of Muhlhausen in further view of Peng. Since Filice teaches away from the claimed invention as indicated above, the combination of Filice, Muhlhausen and Peng must also teach away from the claimed invention. Applicant further submits that dependent claims 3-8 are patentable for depending from patentable base claim 1, which is believed to be patentable for the reasons explained hereinabove.

Applicant respectfully requests reconsideration of both of the rejections in the Final Office Action and that such rejections be withdrawn. Applicant further submits that the claims are in condition for allowance and respectfully solicits the same at an early date.

October 2, 2003

Respectfully submitted



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